# FY2019 Urban Forestry Status

Tuesday, October 1, 2019

The Urban Forestry Manager position was filled at the end of August 2017, just prior to Hurricane Irma.

An evaluation of the standing work orders indicates that the program has fallen behind in the ongoing maintenance of the urban forest. The "urban forest", for this evaluation, means the street trees (or right-of-way trees) and the park trees.

The Parks and Recreation Department Forestry Division has 17 positions dedicated to managing the trees and actively maintaining the resource. Thirteen positions are responsible for the labor and equipment operation providing planting, pruning, removal and emergency services throughout the City. Beginning in FY2019, funding for contracting services (including pruning and tree and stump removals) went from $100k/year to $450k/year.

The TreeMendous Tampa Planting program is administered by 1 staff member. The tree and planting is free and provides individuals and neighborhood associations with trees planted on City street rights-of-way (2 per year if adequate space). This popular program is currently funded at $87.5K from the Tree Trust Fund and plants 400-500 trees annually.
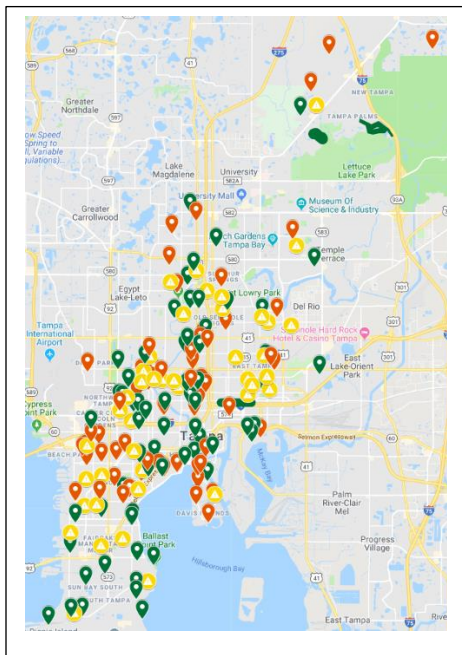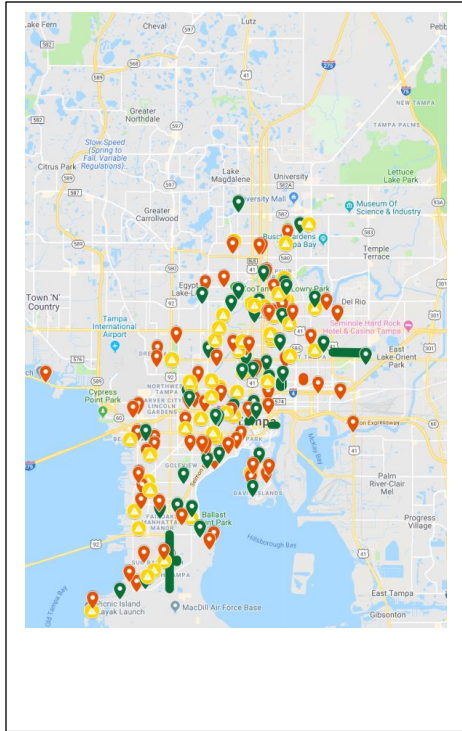

October 2018 Service Requests
Incoming
October 2018 generated 191 total service requests. Routine pruning and misc. requests (68) are indicated in green. Removal requests (65) are orange.
There were 42 emergency requests (yellow triangle) representing branch or tree failure.
There were an additional 16 after hours/weekend emergencies.

Completed
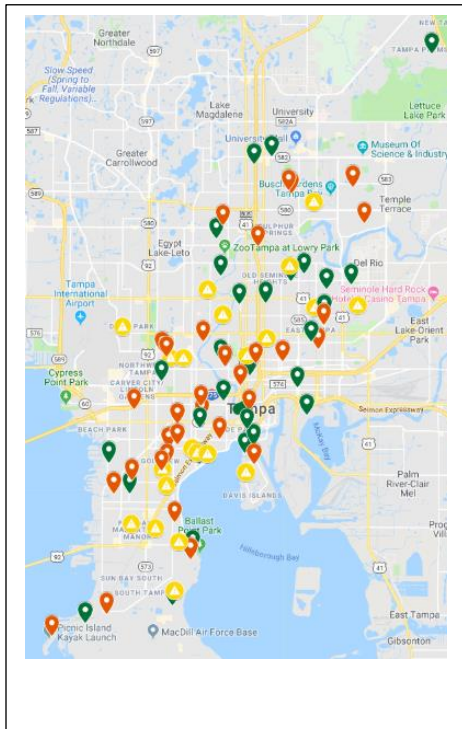58 emergencies; 21 non-emergencies

November 2018 Service Requests

Incoming

November 2018 generated 229 total service requests. Routine pruning and misc. requests (51) are indicated in green. Removal requests (74) are orange.

There were 52 emergency requests (yellow triangle) representing branch or tree failure.

There were an additional 48 after hours/weekend emergencies.

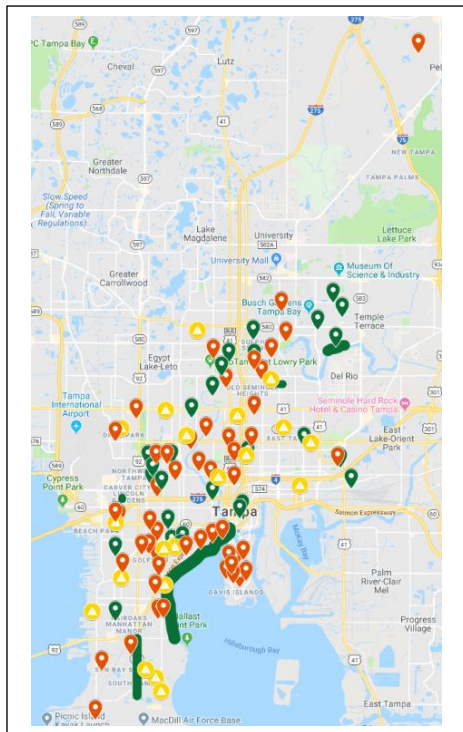### Completed

100 emergencies; 46 non-emergencies

December 2018 Service Requests

Incoming

December 2018 generated 100 total service requests. Routine pruning and misc. requests (31) are indicated in green. Removal requests (34) are orange.

There were 20 emergency requests (yellow triangle) representing branch or tree failure.

There were an additional 15 after hours/weekend emergencies.

Completed

35 emergencies; 49 non-emergencies

January 2019 Service Requests

Incoming

January 2019 generated 130 total service requests.

Routine pruning and misc. requests (32) are indicated in green. Removal requests (54) are orange.

There were 22 emergency requests (yellow triangle) representing branch or tree failure.

There were an additional 22 after hours/weekend emergencies.

Completed

44 emergencies; 79 non-emergencies

February 2019 Service Requests

Incoming

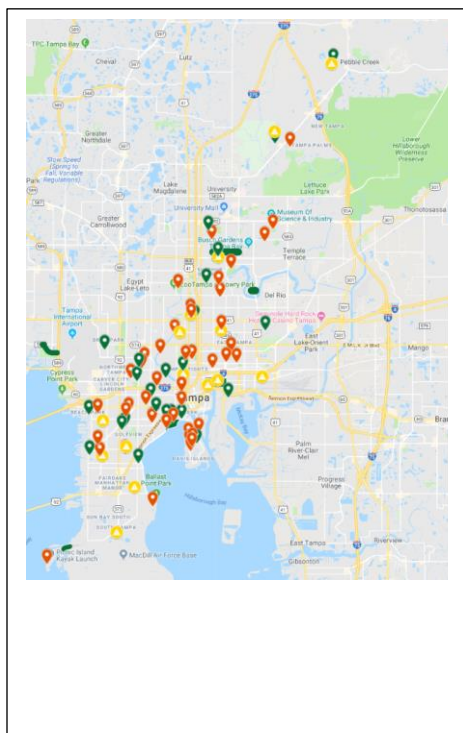February 2019 generated 96 total service requests.

Routine pruning and misc. requests (32) are indicated in green. Removal requests (47) are orange.

There were 14 emergency requests (yellow triangle) representing branch or tree failure.

There were an additional 3 after hours/weekend emergencies.

Completed

17 emergencies; 55 non-emergencies

March 2019 Service Requests

Incoming

March 2019 generated 108 total service requests. Routine pruning and misc. requests (29) are indicated in green. Removal requests (54) are orange. Holiday Wreath Removal is purple.

There were 15 emergency requests (yellow triangle) representing branch or tree failure.

There were an additional 10 after hours/weekend emergencies.

Completed

25 emergencies; 79 non-emergencies (heavy on palm stump removals - 17)

April 2019 Service Requests

Incoming

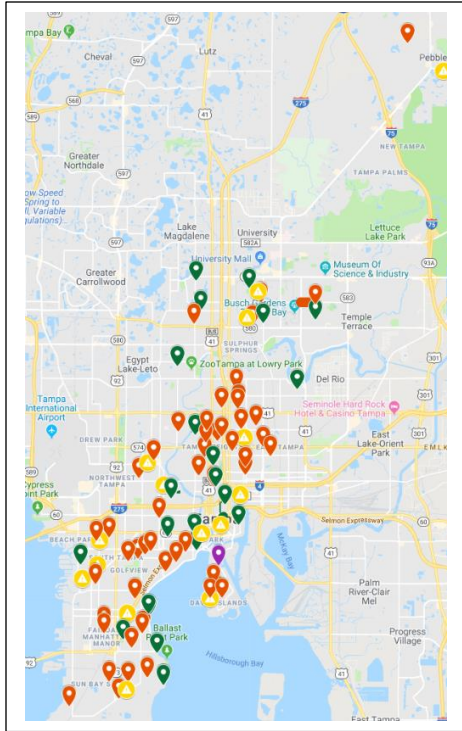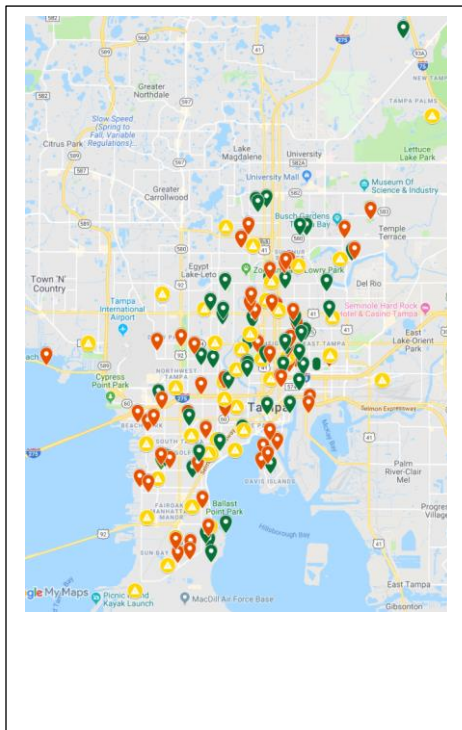April 2019 generated 178 total service requests. Routine pruning and misc. requests (50) are indicated in green. Removal requests (58) are orange.
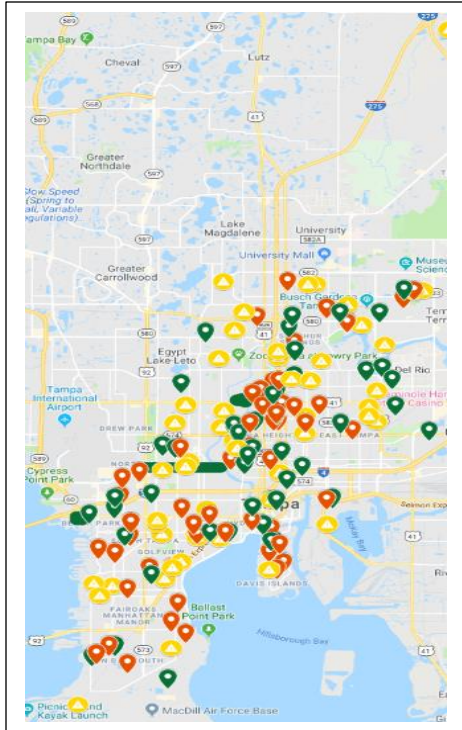
There were 40 emergency requests (yellow triangle) representing branch or tree failure.

There were an additional 30 after hours/weekend emergencies.

Completed

70 emergencies; 96 non-emergencies

May 2019 Service Requests

Incoming

May 2019 generated 213 total service requests. Routine pruning and misc. requests (57) are indicated in green. Removal requests (59) are orange. There were 59 emergency requests (yellow triangle) representing branch or tree failure.

There were an additional 43 after hours/weekend emergencies.

Completed

102 emergencies; 96 non-emergencies

June 2019 Service Requests

Incoming

June 2019 generated 207 total service requests. Routine pruning and misc. requests (44) are indicated in green. Removal requests (38) are orange. There were 77 emergency requests (yellow triangle) representing branch or tree failure.

There were an additional 48 after hours/weekend emergencies.

Completed

125 emergencies; 45 non-emergencies
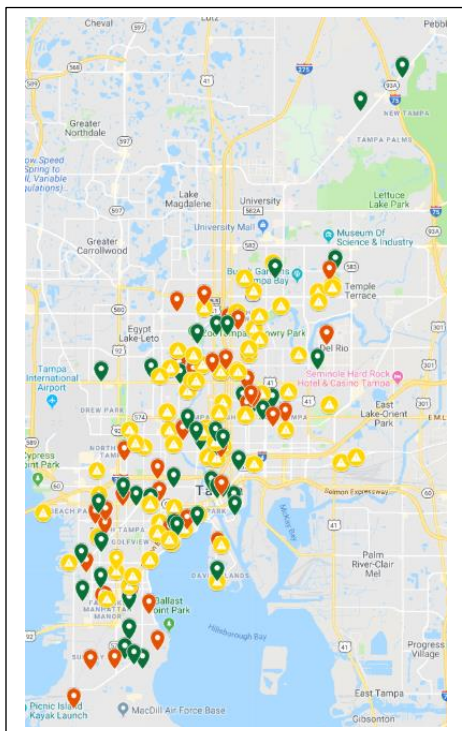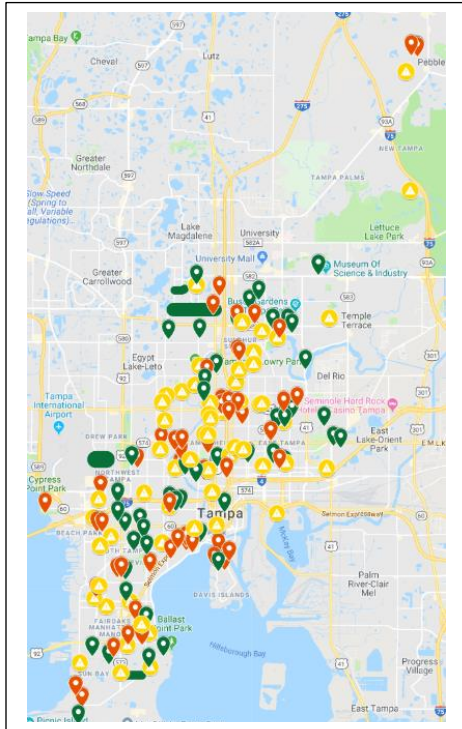
July 2019 Service Requests

Incoming

July 2019 generated 252 total service requests. Routine pruning and misc. requests (54) are indicated in green. Removal requests (59) are orange. There were 59 emergency requests (yellow triangle) representing branch or tree failure.

There were an additional 80 after hours/weekend emergencies.

Completed

139 emergencies; 32 non-emergencies

August 2019 Service Requests

Incoming

August 2019 generated 203 total service requests. Routine pruning and misc. requests (63) are indicated in green. Removal requests (56) are orange. There were 57 emergency requests (yellow triangle) representing branch or tree failure.

There were an additional 27 after hours/weekend emergencies.

Completed

84 emergencies; 58 non-emergencies
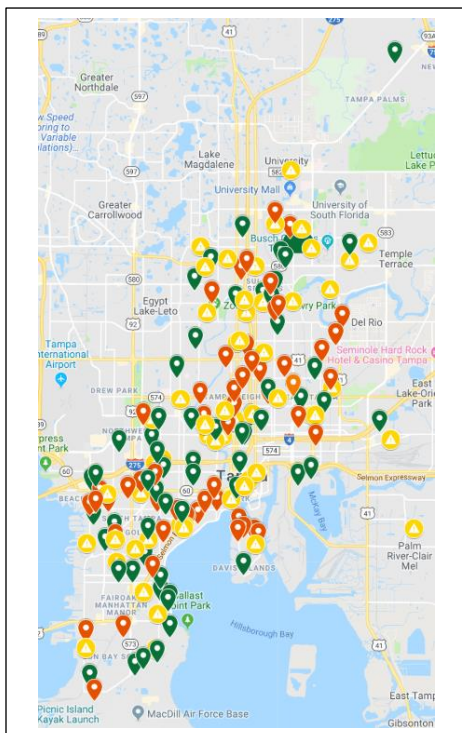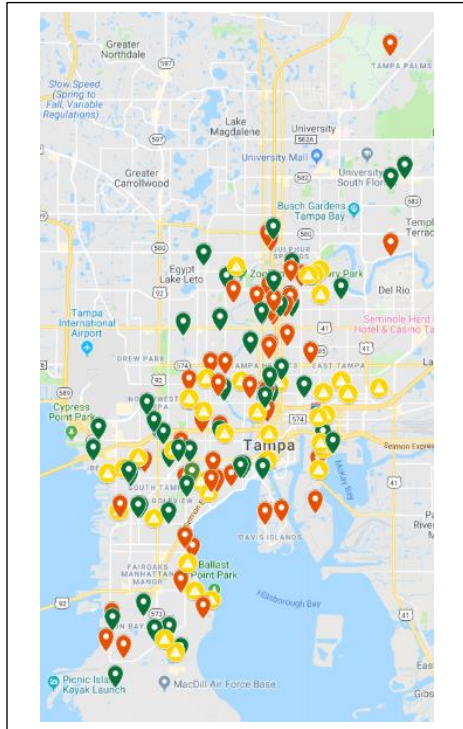
September 2019 Service Requests

Incoming

September 2019 generated 173 total service requests. Routine pruning and misc. requests (50) are indicated in green. Removal requests (49) are orange. There were 39 emergency requests (yellow triangle) representing branch or tree failure.

There were an additional 35 after hours/weekend emergencies.

Completed

74 emergencies; 42 non-emergencies

56% of all work orders completed are emergencies (FY 2019)

	Incoming	Completed	Backlog
October 2018	191	79	112
November 2018	225	146	79
December 2018	100	84	16
January 2019	130	123	7
February 2019	96	72	24
March 2019	108	104	4
April 2019	178	166	12
May 2019	218	198	20
June 2019	207	170	37
July 2019	252	171	81
August 2019	203	142	61
September 2019	173	116	57
Totals	2081	1571	510
Monthly Average	173	131	43 (84 in FY2018)

The average monthly backlog has gone from 84 in FY2018 to 43 in FY2019. This is due to full staffing (17 positions) and an increase in annual contracting from $100,000.00 in FY2018 to $450,000.00 in FY2019.

What do other communities do?

Tampa is the 52nd largest city in the United States with a population of 377k people. A review of the 47th ranked Tulsa, Oklahoma (403k) to 57th ranked Santa Ana, California (334k) urban forestry programs reveals a diverse urban forestry management spectrum. The management classifications are best described as:

1. Proactive
2. Systematic Reactive
3. Reactive
4. Reactive Deferred
5. Deferred

Proactive Management – Wichita, Kansas (pop. 389k) and Honolulu, Hawaii (pop. 351k)

From the Wichita Parks and Recreation website:

> *The Forestry section is responsible for the maintenance of all public trees within 4,900 acres of parks, along 2,500 miles of right-of-ways, and along many sections of the rivers, streams and drainage ways within the City.*

> *Forestry activities include: tree planting; establishment care; pruning; and removal Citywide within parks and along street right-of-ways.*

> *A healthy forest canopy within public areas is maintained through tree pruning, removal of dead and declining trees and planting of new trees including establishment care for three years. Forestry service is provided on a request basis and through systematic operations of pruning and planting. An annual city-wide inspection is scheduled to identify, then remove dead and declining trees as part of the tree risk management program. Emergency tree work is provided to clear and remove storm damaged trees and tree debris. New tree planting and establishment care is provided through a reforestation program for neighborhood and parks and through contractor tree plantings as part of capital roadway projects.*

From the Honolulu Parks and Recreation website:

> *The Division of Urban Forestry consists of an Administrative function, the Horticulture Services Branch, and the Honolulu Botanical Gardens. The division's Administrative Section and the Horticulture Services Branch employ 1 American Society of Consulting Arborists (ASCA) Registered Consulting Arborist; 20 International Society of Arboriculture (ISA) Certified Arborists, three of whom have attained Municipal Specialist certification; 24 ISA Certified Tree Workers; 4 ISA Certified Tree Risk Assessors, and 1 Professional Landcare Network (PLANET) Certified*

Landscape Technician. The Honolulu Botanical Gardens employ an additional 10 ISA Certified Arborists, 1 ISA Certified Tree Risk Assessor, and 1 PLANET Certified Landscape Technician.

It propagates, plants, trims, waters, and maintains shade trees, concrete planters and other ornamental plants cultivated along public roadways, and in City parks and malls.

It clears tree branches obstructing street lights, utility lines, traffic devices, and from rights-of-way of dangerous branches, and clears fallen trees or branches from streets and other City properties.

It supervises contractual tree work and grows and maintains plants for beautification projects, public gardens and for use as ornamentals in government buildings, and at City functions.

Key Signs of a Proactive Program:

- Highly educated/certified professional staff
- Up to date street tree inventory
- Systematic (Cycle/Area) pruning and planting
- Annual City-wide Inspections for poor category trees
- Risk management program
- Post planting tree care (watering, staking, mulching, replacement)
- Resident requests are less than 20% of the workload

Systematic/Reactive Management – Aurora, Colorado (pop. 361k)

From the Aurora Parks, Open Spaces and Trails website:

The city of Aurora has about 40,000 city street trees. City trees are maintained by the city of Aurora as a free service to our residents. Property owners are not allowed to plant their own private trees in the public right of way easement, and such trees are not considered city trees. The Forestry Division keeps an inventory of our city trees.

The Forestry Division operates on a grid pruning cycle, where a contracted crew is scheduled to complete maintenance on all city trees area by area (46 areas, approx. 20 year cycle). In addition to our ongoing contractor grid pruning responsibilities, we receive thousands of requests every year for tree maintenance ahead of schedule. We try our best to complete our work as soon as we can, but often we face a very high volume of tree maintenance needs. Unfortunately, this can sometimes result in long wait times. We apologize for the wait and we appreciate your patience. With the exception of emergencies, tree maintenance will only be provided ahead of schedule if a tree poses a risk to public safety. In order of severity, this includes:

1. *large broken and hanging limbs*
2. *trees with hazardous defects*
3. *dead or dying trees*

H:\State of the Forest\FY 2019 Reports\FY2019_State of the Forest.docx 6/18/2020 Eric Muecke

4. *large dead limbs, and, lastly…*
5. *low limbs impeding traffic*

You may perform some limited tree work on a city tree yourself, but it is still illegal to damage, kill or remove a city-owned tree. Residents can prune low hanging limbs from the ground up to 15 feet. You may also hire a private licensed arborist to perform the work at your own expense, but you will not be reimbursed. Arborists must call the Forestry Division for a permit to trim a city tree prior to performing the work.

Key Signs of a Systematic/Reactive Program:

- Street tree inventory may be old or out of date
- Systematic pruning cycle exceeding 10 years
- No Annual City-wide Inspections for poor category trees
- Risk management program has to prioritize severity, can't address them all
- Resident requests drive over 40% of the workload

Reactive Management – Cleveland, Ohio (pop. 385k)

From the Cleveland DPW - Division of Park Maintenance and Properties website:

This office's activities include the maintenance of all public street and park trees, including the removal of dead and hazardous street trees and overgrown roots which raise sidewalks, planting of replacement trees (based on availability of funding), trimming, and providing public information.

The City of Cleveland Urban Forestry Section is removing all 4,118 ash trees in the right-of-way. The ash trees are infested with a non-native beetle: the Emerald Ash Borer. Once ash trees are removed, homeowners can call the Urban Forestry Section for a replacement tree. The intake department will record all requests in a database. Trees are planted when a funding source is identified.

After a pruning request is received, a City employee will come out and inspect the tree. If the tree requires trimming, it will be placed on a list for service. If you would like to trim it yourself, call Urban Forestry at the above number to request a permit.

Key Signs of a Reactive Program:

- No street tree inventory
- No systematic pruning cycle
- Management by crisis – emerald ash borer infestation
- No risk management program
- Resident requests drive over 60% of the workload

- Making lists for service indicates that back logs are occurring – not everything will be addressed
- Limited funding for meeting reforestation needs

Reactive/Deferred Management – New Orleans, Louisiana (pop. 391k)

From the New Orleans Parks and Parkways website:

The Department of Parks and Parkways maintains all City trees. These include trees on public property such as neutral grounds (medians) and in parks, and trees between the sidewalk and street. The Department responds to requests for City tree removal, tree trimming and stump removal. The Department places primary importance on the issues of public safety and prioritizes its work accordingly.

Citizens may hire an arborist and pay to have work done to a City tree in front of their property if approved the City's Urban Forester. This work must be done by a Louisiana licensed and insured arborist and requires a free Tree Work Permit from Parks and Parkways. Stumps may be removed without a permit, but should be done only by a licensed contractor with insurance to protect the homeowner in case of accidents.

The Department of Parks and Parkways encourages pre-approved tree planting by citizens, but requires citizens to get a free Tree Planting Permit to plant a tree between the sidewalk and curb.

Key Signs of a Reactive/Deferred Program:

- No street tree inventory
- No systematic pruning cycle
- All work is prioritized by public safety – "management by crisis" - not all requests will be completed
- No risk management program
- Resident requests drive over 80% of the workload
- Residents may get a permit and hire their own tree service

> **The City of Tampa's Urban Forestry Program qualifies as a Reactive/Deferred Management program.**
>
> **100% of the work we do is generated by service requests from residents, staff and other Departments.**
>
> **56% of all work orders completed are emergencies.**
>
> **There is no street tree inventory and planning is based on a month-to-month basis with no pro-active plan beyond 3 months. Residents are requesting permission to contract out street tree work at their expense as the City's timeframe of 18 months (or longer) does not meet their expectations. City Parks receive the least service as Forestry is too busy reacting to emergencies and service requests from the public.**

Deferred Management – Arlington, Texas (pop. 392k) and Bakersfield, California (pop. 351k)

From the Arlington Parks and Recreation website:

> *In residential areas the City of Arlington does not maintain the area between the curb and sidewalk. However, on some larger roads the right-of-way along one or both sides may be mowed and maintained by the City. According to the Code of Ordinances, limbs must be 7 feet above sidewalks and 14 feet above roads, the owner of the land where the tree is located is responsible for pruning to maintain that safety clearance.*

From the Bakersfield Recreation and Parks website:

> *The City is responsible for trees and other landscaping located in parks, on medians, and in "streetscapes". A road right-of-way is a specific type of easement. The City maintains roads within these easements. However, the City does not become the owner of the land on which the road is built. Street trees belong to the actual or adjacent property owner, even if they are located within a dedicated road "right of way". As a property owner, you are responsible for ensuring the safety of the street trees on property adjacent to the roadway in the same way you are responsible for trees which are located in your front, side or backyard areas.*

Key Signs of a Deferred Program – street trees are assigned to adjacent landowner leaving the Forestry Division with parks, medians and special streetscapes.

Recommendations

The current Forestry Operating Procedure is:
- Receive a Service Request
- Call the requestor within one week to notify them that we will inspect within 1 month
- Upon inspection, priority work is scheduled at 3 months, all other work is scheduled up to 18 months or longer. Notify the requestor of the schedule.
- If we maintain status quo, **we will continue to fall behind**

It is recommended that the City incorporate an Area Management Cycle to address the maintenance needs of the street trees and reduce the amount of incoming requests. The City should be divided into a total of 6 zones:
- 2 zones North (north of MLK, divided East and West)
- 2 zones Central (south of MLK, north of Kennedy, divided East and West)
- 2 zones South (south of Kennedy, divided North and South, perhaps at El Prado)

Area Management Cycle (Best Management Practices)

This means that all the street trees would be maintained once every 6 years. The Goals for maintenance would be:
1. Healthy street trees:
   a. Raise the canopy for eventual permanent 15 foot clearance over the road and a balanced canopy over the sidewalk
   b. Remove all deadwood greater than two inch diameter
   c. Structural prune weak attachments and co-dominant stems
   d. Directional and Crown reduction pruning for clearance (house, street light, street sign, line of sight, etc.)
2. Identify dead and dying trees and schedule removal, stump removal and evaluate for replacement.
3. All of this work would be considered Mitigation in the Disaster Management Cycle. This would lead to greater Preparation, a more efficient Response and a faster Recovery.
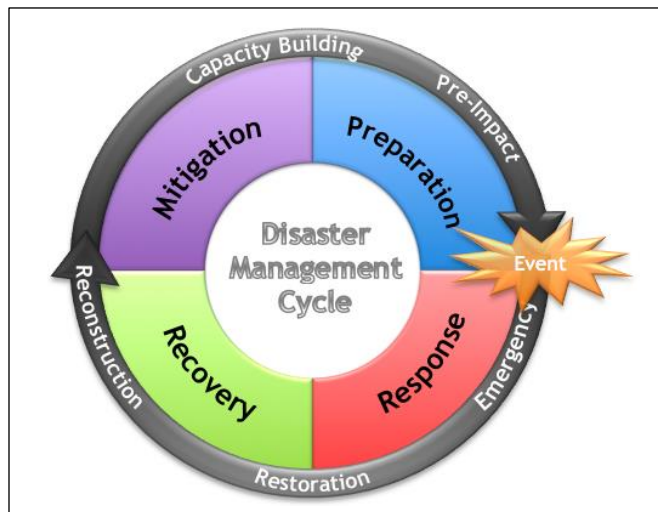
Please note that utility line pruning is done by TECO or their contractor on a 3-5 year cycle. City staff must maintain a distance of 10 feet from utility lines as they are not line clearance certified.

This work would require:
- An inventory of street trees to determine species and size to break into diameter classes to put out an RFP for contractors
- An appropriate budget for the job
- A competitive bid by local contractors capable of completing the project
- An outreach program to let the residents know what is happening
- Work should begin in the North or Central areas

This would provide:
- One third of the Cities street trees would be pruned in the next 2 years resulting in decreases in service requests
- A reduction in canopy/infrastructure conflict (sign, light, sight triangle, building, etc.)
- A reduction in vehicle/tree conflict
- Reduction in municipal vehicle damage and expense
- More resiliency in the tree population to survive hurricanes and storms
- A reduction in deadwood pruning requests
- A reduction in emergency responses
- A reduction in pedestrian/tree conflict
- A reduction in risk and liability as the City begins to manage the tree population proactively instead of reactively
- Increase in ability of City Staff to address the other City Zones until they are maintained in the cycle
- Increase in the ability of City Staff to address park tree maintenance
- Increase in the ability of City Staff to address special needs/stumps/projects/plantings

The City did not fall into this backlog overnight. It will take many years to bring the program up to date and proactive in the management of our natural resource.